L1 L2 L3 L4	FILE 'REGISTRY' ENTERED AT 15:27:26 ON 24 JUN 2002 1 S PYROGLUTAMIC ACID/CN 2 S SODIUM CITRATE/CN 1 S ZINC ACETATE/CN 2 S ASCORBIC ACID/CN	
L5	1 S CITRIC ACID/CN	
L6	1 S PHYTIC ACID/CN	
	FILE 'USPATFULL, CAPLUS' ENTERED AT 15:28:48 ON 24 JUN 2002	
L7	75813 S L1 OR PROLINE OR (PYROGLUTAMATE#) OR PYROGLUTAMIC	
L8	31833 S L2 OR (SODIUM CITRATE)	•
L9	3165 S L7 AND L8	_
L10	10875 S L3 OR (ZINC ACETATE)	<
L11	121 S L7 AND L10	
L12	219952 S L4 OR L5 OR L6 OR (CITRIC ACID) OR (ASCORBIC ACID) OR	ث
(PHY	cc	9
L13	1064 S L10 AND L12	_
L14	72 S L11 AND L12	
L15	3 S INFLUENZA AND L14	
L16	12 S L13 AND INFLUENZA	
L17	12 DUPLICATE REMOVE L16 (0 DUPLICATES REMOVED)	

4/2/2

The contract of the services o

```
ANSWER 1 OF 12 USPATFULL
AN
       2002:98926 USPATFULL
TI
       Aliginate particle formulation
IN
       Kwon, Sung-Yun, Fremont, CA, UNITED STATES
       Kochinke, Frank, Fremont, CA, UNITED STATES
PΙ
       US 2002051821
                          A1
                                20020502
AΙ
       US 2001-949392
                          A1
                                20010907 (9)
       US 2000-231119P
PRAI
                           20000908 (60)
       Utility
DT
FS
       APPLICATION
LN.CNT 1231
INCL
       INCLM: 424/489.000
       INCLS: 424/184.100
       NCLM: 424/489.000
NCL
       NCLS: 424/184.100
IC
       [7]
       ICM: A61K039-00
       ICS: A61K039-38; A61K009-14
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L17 ANSWER 2 OF 12 USPATFULL
       2002:98924 USPATFULL
AN
ΤI
       Peptides, compositions and methods for the treatment of burkholderia
IN
       Kuhner, Carla H., Avondale, PA, UNITED STATES
       Romesser, James A., Kennett Square, PA, UNITED STATES
ΡI
       US 2002051819
                                20020502
                          A1
ΑI
       US 2001-881954
                          A1
                                20010615 (9)
PRAI
       US 2000-212440P
                           20000616 (60)
DT
       Utility
FS
       APPLICATION
LN.CNT 2739
INCL
       INCLM: 424/484.000
       INCLS: 514/017.000; 424/486.000; 424/488.000
NCL
       NCLM: 424/484.000
       NCLS: 514/017.000; 424/486.000; 424/488.000
IC
       [7]
       ICM: A61K009-14
       ICS: A61K038-08
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L17
     ANSWER 3 OF 12 USPATFULL
AN
       2002:31994 USPATFULL
ΤI
       Methods and apparatus for fine particle formation
IN
       Sievers, Robert E., Boulder, CO, UNITED STATES
       Karst, Uwe, Muenster, GERMANY, FEDERAL REPUBLIC OF
PΙ
       US 2002018815
                          A1
                                20020214
AΙ
       US 2001-858998
                          A1
                                20010516 (9)
       Continuation of Ser. No. US 2000-598570, filed on 21 Jun 2000, PENDING
RLI
       Continuation of Ser. No. US 1997-847310, filed on 24 Apr 1997, GRANTED,
       Pat. No. US 6095134 Division of Ser. No. US 1994-224764, filed on 8 Apr
       1994, GRANTED, Pat. No. US 5639441 Continuation-in-part of Ser. No. US
       1992-846331, filed on 6 Mar 1992, GRANTED, Pat. No. US 5301664
DT
       Utility
FS
       APPLICATION
LN.CNT 1243
INCL
       INCLM: 424/489.000
       INCLS: 264/005.000
NCL
       NCLM: 424/489.000
```

```
AN
       2000:94716 USPATFULL
ΤI
       Composition to treat ear disorders
IN
       Petrus, Edward J., Austin, TX, United States
PΑ
       Advanced Medical Instruments, Austin, TX, United States (U.S.
       corporation)
       US 6093417
PΙ
                                20000725
AΙ
       US 1999-228119
                                19990111 (9)
DT
       Utility
FS
       Granted
LN.CNT 699
INCL
       INCLM: 424/437.000
       INCLS: 514/171.000; 514/254.000
NCL
       NCLM: 424/437.000
       NCLS: 424/150.100; 424/744.000; 514/008.000; 514/171.000; 514/253.080
IC
       [7]
       ICM: A61K031-495
       ICS: A61K031-56
       424/437; 514/171; 514/254
EXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 9 OF 12 CAPLUS COPYRIGHT 2002 ACS
L17
AN
     1998:776660 CAPLUS
DN
     130:29242
TI
     Pharmaceutical compositions of flurbiprofen and burn-masking agent for
     treating sore throat
IN
     Barrett, David Michael; Jones, Huw Lyn; Jones, Idwal; Smith, Carl Simon
PA
     The Boots Company PLC, UK
     PCT Int. Appl., 21 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                            APPLICATION NO. DATE
                      _ _ _ _
                                            -----
PΙ
     WO 9852545
                      A1
                             19981126
                                            WO 1998-EP3180
                                                               19980522
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
             NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
             UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, ML, MR, NE, SN, TD, TG
     AU 9879167
                       A1 19981211
                                            AU 1998-79167
                                                               19980522
PRAI GB 1997-10525
                             19970522
     GB 1997-10632
                             19970522
     WO 1998-EP3180
                             19980522
              THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 13
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 10 OF 12 CAPLUS COPYRIGHT 2002 ACS
L17
     1998:776655 CAPLUS
AN
DN
     130:29238
ΤI
     Pharmaceutical compositions containing NSAIDS
     Barrett, David Michael; Jones, Huw Lyn; Jones, Idwal; Smith, Carl Simon
IN
     The Boots Company PLC, UK
PA
     PCT Int. Appl., 25 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
    English
```

```
NCLS: 264/005.000
 IC
        [7]
        ICM: A61K009-14
        ICS: B29B009-00
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 4 OF 12 USPATFULL
        2001:226747 USPATFULL
ΤI
        Polypeptide transition metal salts and method of enhancing anti-HIV
        activity of polypeptide
IN
        Matsumoto, Akiyoshi, Hino, Japan
        Waki, Michinori, Higashimurayama, Japan
PA
        Seikagaku Corporation, Tokyo, Japan (non-U.S. corporation)
PΙ
        US 6329498
                            В1
                                 20011211
        WO 9816555 19980423
AΙ
        US 1999-284241
                                 19990414 (9)
        WO 1997-JP3711
                                 19971015
                                 19990414
                                           PCT 371 date
                                 19990414 PCT 102(e) date
        JP 1996-291215
PRAI
                             19961015
        Utility
DT
FS
        GRANTED
LN.CNT 999
INCL
        INCLM: 530/326.000
        INCLS: 424/001.170; 424/009.200
NCL
       NCLM: 530/326.000
       NCLS: 424/009.200
IC
        [7]
        ICM: A61K038-00
        ICS: A61K051-00; A61K049-00
       530/326; 424/1.17; 424/9.2
EXF
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 5 OF 12 USPATFULL
AN
       2001:185508 USPATFULL
TI
       Water-soluble zinc pyruvates or their hydrates, method for the product
       ion thereof and their use
       Pischel, Ivo, Trostberg, Germany, Federal Republic of
Paradies, Henrich Hasko, Iserlohn, Germany, Federal Republic of
IN
       SKW Trostberg Aktiengesellschaft, Trostberg, Germany, Federal Republic
PΑ
       of (non-U.S. corporation)
       US 6307080
PΙ
                                 20011023
       WO 2000002841 20000120
       US 2000-700381
ΑI
                                 20001213 (9)
       WO 1999-EP4812
                                 19990708
                                 20001213
                                          PCT 371 date
                                 20001213 PCT 102(e) date
PRAI
       DE 1998-19830770
                            19980709
DT
       Utility
FS
       GRANTED
LN.CNT 705
INCL
       INCLM: 556/131.000
       INCLS: 514/494.000
       NCLM: 556/131.000
NCL
IC
       [7]
       ICM: C07F003-06
       ICS: A61K031-315
EXF
       556/131; 514/494
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
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```
L17
      ANSWER 6 OF 12 CAPLUS COPYRIGHT 2002 ACS
ΑN
      2001:300515 CAPLUS
DN
      134:300833
TI
      Compositions containing pyroglutamic acid for prevention and treatment of
      cold and influenza-like symptoms and their methods of use
IN
      Rennie, Paul John; King, Simon Phillip; Biedermann, Kimberly Ann; Morgan,
      Jeffrey Michael
PA
      The Procter & Gamble Company, USA
      PCT Int. Appl., 15 pp.
SO
      CODEN: PIXXD2
DT
      Patent
LA
      English
FAN.CNT 21
      PATENT NO.
                                                    APPLICATION NO. DATE
                          KIND DATE
                          _ _ _ _
                                  -----
                                                    ------------
PΙ
      WO 2001028556
                           A2
                                  20010426
                                                    WO 2000-US28856 20001019
      WO 2001028556
                           A3
                                 20011011
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
          SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
               CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRAI US 1999-421131
                                 19991019
     ANSWER 7 OF 12 USPATFULL
        2000:96821 USPATFULL
ΑN
ΤI
        Methods and apparatus for fine particle formation
IN
        Sievers, Robert E., Boulder, CO, United States
        Karst, Uwe, Muenster, Germany, Federal Republic of
PΑ
        The Board of Regents of the University of Co, Boulder, CO, United
States
        (U.S. corporation)
PΙ
        US 6095134
                                     20000801
ΑI
        US 1997-847310
                                     19970424 (8)
        Division of Ser. No. US 1994-224764, filed on 8 Apr 1994, now patented,
        Pat. No. US 5639441 which is a continuation-in-part of Ser. No. US
        1992-846331, filed on 6 Mar 1992, now patented, Pat. No. US 5301664
        Utility
DT
FS
        Granted
LN.CNT 1257
INCL
        INCLM: 128/200.140
        INCLS: 128/200.230
NCL
        NCLM: 128/200.140
        NCLS: 128/200.230
IC
        [7]
        ICM: A61M011-00
EXF
        128/200.14; 128/203.12; 128/203.15; 128/200.23; 424/45; 424/46;
424/9.1;
        424/9.3; 424/401; 424/489; 424/450; 427/255.1; 427/255.6; 222/635;
        252/305; 252/312; 252/314; 252/319; 252/309; 210/634; 210/639; 210/635;
        210/638; 210/656; 210/659; 210/643; 435/178; 435/180; 435/182; 514/202;
        514/2; 514/21; 530/412; 530/418; 530/419; 530/427; 530/413; 530/417;
        530/38.5; 526/207
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
```

L17 ANSWER 8 OF 12 USPATFULL

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FAN.CNT 1
                                        APPLICATION NO. DATE
    PATENT NO.
                    KIND DATE
     -----
                                          ------
    WO 9852540
                     A1 19981126
                                         WO 1998-EP3179 19980522
PΤ
        W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
            DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,
            KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
            NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
            UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
            FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
            CM, GA, GN, ML, MR, NE, SN, TD, TG
                                         AU 1998-81079
                     A1 19981211
                                                          19980522
    AU 9881079
PRAI GB 1997-10505
                           19970522
    GB 1997-10527
                           19970522
    GB 1997-10544
                           19970522
    WO 1998-EP3179
                           19980522
             THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 10
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
L17
    ANSWER 11 OF 12 USPATFULL
      97:51698 USPATFULL
AN
TI
      Methods for fine particle formation
IN
      Sievers, Robert E., Boulder, CO, United States
      Karst, Uwe, Muenster, Germany, Federal Republic of
      Board of Regents of University of Colorado, Boulder, CO, United States
PA
       (U.S. corporation)
      US 5639441
PΤ
                              19970617
ΑI
      US 1994-224764
                              19940408 (8)
      Continuation-in-part of Ser. No. US 1992-846331, filed on 6 Mar 1992,
      now patented, Pat. No. US 5301664
DT
      Utility
FS
      Granted
LN.CNT 1280
INCL
      INCLM: 424/009.300
       INCLS: 128/200.230; 252/305.000; 252/314.000; 252/319.000; 424/045.000;
             424/046.000; 427/255.100; 427/255.600
NCL
             424/009.300
      NCLM:
      NCLS:
             128/200.230; 239/002.100; 424/045.000; 424/046.000; 427/255.250;
             427/255.600
IC
       [6]
       ICM: A61K049-00
       ICS: A61K009-12; C09K003-30; C23C016-00
EXF
       252/305; 252/312; 252/314; 252/319; 424/45; 424/46; 424/9.1; 424/9.3;
       427/255.1; 427/255.6; 128/200.33; 128/200.23; 222/635
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L17 ANSWER 12 OF 12 USPATFULL
      91:8801 USPATFULL
ΑN
ΤI
      Carbocyclic nucleoside analogs with antiviral activity
      Norbeck, Daniel W., Lindenhurst, IL, United States
TN
      Rosen, Terry J., East Lyme, CT, United States
      Sham, Hing L., Gurnee, IL, United States
PA
      Abbott Laboratories, Abbott Park, IL, United States (U.S. corporation)
PI
      US 4988703
                              19910129
ΑI
      US 1989-355594
                              19890522 (7)
DТ
      Utility
FS
      Granted
LN.CNT 1656
INCL
      INCLM: 514/262.000
```

```
INCLS: 514/081.000; 514/086.000; 514/261.000; 514/263.000; 514/265.000;
              514/266.000; 514/274.000; 544/243.000; 544/244.000; 544/265.000;
              544/267.000; 544/272.000; 544/276.000; 544/277.000; 544/311.000;
              544/312.000; 544/313.000; 544/314.000; 544/317.000; 544/322.000;
              544/329.000; 562/013.000; 564/001.000; 564/046.000
NCL
              514/263.370
      NCLM:
              514/081.000; 514/086.000; 514/274.000; 544/243.000; 544/244.000;
      NCLS:
              544/265.000; 544/267.000; 544/272.000; 544/276.000; 544/277.000;
              544/311.000; 544/312.000; 544/313.000; 544/314.000; 544/317.000;
              544/322.000; 544/329.000; 562/013.000; 564/001.000; 564/046.000
IC
       [5]
       ICM: A61K031-52
       ICS: C07D473-18; C07D473-30; C07D473-34
       544/244; 544/265; 544/267; 544/272; 544/277; 544/276; 514/81; 514/261;
EXF
       514/263; 514/265; 514/266; 514/262
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
```

Co., Inc.), Zinc acetate.2H.sub.2 O and ammonia water (Wako Pure Chem. Industries Ltd.)

DETD . . . nicotinic acid was dissolved in 100 ml of deionized water with stirring in a hot bath. Similarly, 4.5 g of zinc acetate.2H.sub.2 O was dissolved in 100 ml of deionized water in a hot bath, and both were mixed with vigorous stirring.. . .

DETD 3,4-Dihydroxybenzoic acid (protocatechuic acid) was provided by Tokyo Kasei Kogyo Co., Ltd., and zinc acetate.2H.sub.2 O, methanol and sodium hydroxide were of guaranteed grade of Wako Pure Chem. Industries Ltd., all of which were used. . .

DETD 7.0 g of zinc acetate.2H.sub.2 O was dissolved in 40 ml of deionized water with stirring in a water bath. Similarly, 5.0 g of

protocatechuic. . .

DETD After completing CO.sub.2 generation, a small amount of sodium carbonate, then excess zinc acetate.2H.sub.2 O, were added to the mixture, and stirred for 15 to 30 min. The precipitate was filtered with a No.. .

CLM What is claimed is:

. . . the group consisting of glycine, alanine, serine, cysteine, djenkolic

acid, aminobutyric acid, threonine, valine, methionine, leucine, isoleucine, phenylalanine, tyrosine, thyroxine, proline, tryptophan, taurine, aspartic acid, glutamic acid, arginine, lysine, ornithine, and histidine.

. . . the group consisting of glycine, alanine, serine, cysteine, $\ensuremath{\operatorname{djenkolic}}$

acid, aminobutyric acid, threonine, valine, methionine, leucine, isoleucine, phenylalanine, tyrosine, thyroxine, proline, tryptophan, taurine, aspartic acid, glutamic acid, arginine, lysine, ornithine, and histidine.

. . . the group consisting of glycine, alanine, serine, cysteine, djenkolic

acid, aminobutyric acid, threonine, valine, methionine, leucine, isoleucine, phenylalanine, tyrosine, thyroxine, proline, tryptophan, taurine, aspartic acid, glutamic acid, arginine, lysine, ornithine, and histidine.

. . . the group consisting of glycine, alanine, serine, cysteine, djenkolic

acid, aminobutyric acid, threonine, valine, methionine, leucine, isoleucine, phenylalanine, tyrosine, thyroxine, **proline**, tryptophan, taurine, aspartic acid, glutamic acid, arginine, lysine, ornithine, and histidine.

```
SUMM
      Preferred zinc salts include zinc acetate,
      zinc acetate hydrates such as zinc
       acetate-2-water, zinc aluminum oxide complexes such as gahnite,
       zinc diamine, zinc antimonide, zinc bromate hydrates such as zinc
      bromate-6-water, zinc bromide,.
SUMM
      Especially preferred zinc salts include zinc citrate, zinc oxide, zinc
       chloride, zinc acetate, zinc stearate, zinc sulfate,
       and mixtures thereof. Zinc citrate is especially preferred.
               (Arlamol E) 3.25
 PHASE C: Polypropylene glycol-15 stearyl ether (Arlamol E) 2.17
                                   titanium dioxide 0.75
 PHASE D: Sodium Dehydroacetate 5.00
   Citric acid 0.19
  water U.S.P. 17.00
   50% NaOH 0.94
  PHASE E: Benzyl Alcohol 0.50
   Silicone fluid (DC Q2 - 1401; 0.75
   cyclomethicone/dimethiconol.
      . . denatured ethanol 4-17
 salicylic acid 1.45
 dipropylene glycol 0-14
 PVP (polymeric dispersing agent) 1
 procetyl AWS (PPG-5 ceteteth, surfactant) 3
 tri-sodium citrate 0.3
 tetrasodium EDTA 0.1
 glycerin 10-30
 Dehydroacetic acid 4
 sodium chloride 0.3
 water 15.85-34.85
```

```
these acids.
DETD
       Commercially available sources of vitamin C can be used herein.
       Encapsulated ascorbic acid and edible salts of
       ascorbic acid can also be used. Typically, from about
       5% to about 200% of the USRDI of vitamin C is used in.
DETD
       . . . oxidation can contribute to off-flavor development and flavor
       loss. Excessive oxidation can also lead to degradation and inactivation
       of any ascorbic acid or other easily oxidized
       vitamin or minerals in the mix.
       . . acid) or flavonoids (e.g., anthocyanins, catechins, flavonols)
DETD
       that are typically present in these beverages or foods. Suitable
       reducing agents include ascorbic acid, ascorbyl
       palmitate, sodium bisulfite, erythorbic acid, as well as mixtures of
       these reducing agents. The preferred reducing agent is ascorbic
       acid. Suitable complexing agents include hydroxypolycarboxylic
       acids such as citric acid, tartaric acid, and malic
       acid, polyphosphates and their respective salts such as sodium
       hexametaphosphate, sodium trimetaphosphate, and sodium
tripolyphosphate,
       aminopolycarboxylic. . . acids such as lactic acid and acetic acid,
       as well as mixtures of these complexing agents. Preferred complexing
       agents are citric acid, tartaric acid, sodium
       hexametaphosphate and ethylenediamine tetraacetic acid (EDTA).
DETD
       In the case of citric acid, a ratio of complexing
       agent to iron source in the range of from about 1:1 to about 2000:1,
      preferably about from about 20:1 to about 500:1, is usually sufficient
       to prevent undesired color formation. In the case of ascorbic
       acid, a ratio of reducing agent to iron source in the range of
       from about 4:1 to about 50:1, preferably about.
DETD
Example 1
 INGREDIENT Percent by Weight
 granulated sucrose 73.9
 vitamin premix.sup.1 1
 flavors.sup.2 4.9
 clouding agent.sup.3 1.4
   citric acid 12.0
 zinc gluconate 0.4
 ferric saccharate 0.6
   sodium citrate 5.1
 color 0.1
 Total 100
DETD
Example 1
 INGREDIENT Percent by Weight
granulated sucrose 73.9
 vitamin premix.sup.1 1
 flavors.sup.2 4.9
 clouding agent.sup.3 1.4
   citric acid 12.0
zinc gluconate 0.4
 ferric saccharate 0.6
   sodium citrate 5.1
 color 0.1
Total 100
```

DETD

```
Example 2
 INGREDIENT Percent by Weight
 granulated sucrose 74.1
 vitamin premix.sup.1 1
 flavors.sup.2 4.9
 clouding agent.sup.3 1.4
 color 0.1
   citric acid 12.6
 zinc gluconate 0.4
 encapsulated ferrous sulfate.sup.4 0.4
   sodium citrate 5.1
 Total 100.00
 .sup.1Vitamin premix of Example 1
 .sup.2The limon flavor is a combination of two flavors.
DETD
Example 2
 INGREDIENT Percent by Weight
 granulated sucrose 74.1
 vitamin premix.sup.1 1
 flavors.sup.2 4.9
 clouding agent.sup.3 1.4
 color 0.1
   citric acid 12.6
 zinc gluconate 0.4
 encapsulated ferrous sulfate.sup.4 0.4
   sodium citrate 5.1
 Total 100.00
 .sup.1Vitamin premix of Example 1
 .sup.2The limon flavor is a combination of two flavors.
DETD
 INGREDIENT Percent by Weight
 granulated sucrose 90.24
 vitamin premix.sup.1 0.32
 orange flavor 1.27
 clouding agent.sup.2 1.4
   citric acid 4.6
 zinc gluconate 0.1
 iron (amino acid chelate) 0.056
   sodium citrate 1.9
 colors.sup.3 0.121
 Total 100.00
 .sup.1Vitamin premix of Example 1 plus iodine as potassium iodide.
 .sup.2The clouding agent. . .
DETD
 INGREDIENT PERCENT BY WEIGHT
```

```
granulated sucrose 82.2
 vitamin premix.sup.1 1.1
 flavor 2.7
   citric acid 8.1
 tannic acid 0.27
 malic acid 1
 zinc gluconate 0.36
 iron (amino acid chelate) 0.2
   sodium citrate 3.7
 colors.sup.2 0.37
 Total 100.00
 .sup.1Vitamin premix of Example 5.
 .sup.2The colors are a combination of FD&C Lake.
DETD
 INGREDIENT PERCENT BY WEIGHT
 granulated sucrose 90.2
 vitamin premix.sup.1 0.2
 flavor 1.3
 clouding agent.sup.2 1.4
   citric acid 4.8
 zinc gluconate 0.1
 iron (amino acid chelate) 0.1
   sodium citrate 1.9
 colors.sup.3 0.37
 Total 100.00
 .sup.1Vitamin premix of Example 5.
 .sup.2The clouding agent is a mixture of corn.
DETD
 INGREDIENT PERCENT BY WEIGHT
 granulated sucrose 64.5
 vitamin premix.sup.1 1.1
 flavor 4.6
 clouding agent.sup.2 4.9
   citric acid 17.1
 zinc gluconate 0.3
 iron (amino acid chelate) 0.2
   sodium citrate 6.9
 colors.sup.3 0.4
 Total 100.00
 .sup.1Vitamin premix of Example 5.
 .sup.2The clouding agent is a mixture of corn.
DETD
 INGREDIENT PERCENT BY WEIGHT
 vitamin premix.sup.1 4.0
 flavor 12.8
 clouding agent.sup.2 13.6
   citric acid 47.8
 zinc gluconate 1
```

iron (amino acid chelate) 0.6
 sodium citrate 19.1
colors.sup.3 1.2
Total 100.00

.sup.1Vitamin premix of Example 5.
.sup.2The clouding agent is a mixture of corn. .
DETD

INGREDIENTS PERCENT BY WEIGHT

Tea solids 0.79
Sugar 4.72
Citric acid 0.1
Ascorbic acid 0.04
FERROCHEL 0.01
Water 94.35
CLM What is claimed is:

- . A composition according to claim 1 wherein the zinc is selected from the group consisting of zinc sulfate, zinc chloride, zinc acetate, zinc gluconate, zinc ascorbate, zinc citrate, zinc aspartate, zinc picolinate, amino acid chelated zinc, zinc oxide, and mixtures thereof.
 - . 3. A composition according to claim 2 wherein at least one edible acid is selected from the group consisting of **citric** acid, malic acid, tannic acid, tartaric acid, phosphoric acid, acetic acid, lactic acid, maleic acid, and mixtures thereof.
 - 5. A composition according to claim 4 wherein at least one edible acid is citric acid.
 - 12. A composition according to claim 11 wherein the zinc is selected from the group consisting of zinc sulfate, zinc chloride, zinc acetate, zinc gluconate, zinc ascorbate, zinc citrate, zinc aspartate, zinc picolinate, amino acid chelated zinc, zinc oxide, and mixtures thereof.
 - claim 12 wherein the ferric ion reducing agents and ferric ion complexing agents are selected from the group consisting of citric acid, tartaric acid, malic acid, lactic acid, acctic acid, sodium hexametaphosphate, sodium trimetaphosphate, sodium tripolyphosphate, ethylenediamine tetraacetic acid, ethylenediamine tetraacetic acid disodium salt, diethylenetriamine pentaacetic acid, ascorbic acid, ascorbyl palmitate, sodium bisulfite, erythorbic acid, and mixtures thereof.
 - 14. A composition according to claim 13 wherein at least one of the agents is citric acid and wherein the ratio of iron to citric acid is from about 1:1 to about 2000:1, by weight.
 - 15. A composition according to claim 14 wherein the ratio of iron to citric acid is from about 20:1 to about 500:1, by weight.
 - 16. A composition according to claim 13 wherein at least one agent is ascorbic acid and wherein the ratio of iron to ascorbic acid is from about 4:1 to about 50:1, by weight.

- . the USRDI of zinc wherein the zinc is selected from the group consisting of zinc gluconate, amino acid chelated zinc, zinc acetate, zinc ascorbate, zinc citrate, zinc aspartate, zinc picolinate, zinc oxide, and mixtures thereof; (c) from 0% to about 98% of. . .
- 24. A composition according to claim 23 wherein at least one edible acid

is citric acid.

- 31. A composition according to claim 30 wherein the zinc is selected from the group consisting of zinc sulfate, zinc chloride, zinc acetate, zinc gluconate, zinc ascorbate, zinc citrate, zinc aspartate, zinc picolinate, amino acid chelated zinc, zinc oxide, and mixtures thereof.
- . claim 31 wherein the ferric ion reducing agents and ferric ion complexing agents are selected from the group consisting of citric acid, tartaric acid, malic acid, lactic acid, acetic acid, sodium hexametaphosphate, sodium trimetaphosphate, sodium tripolyphosphate, ethylenediamine tetraacetic acid, ethylenediamine tetraacetic acid disodium salt, diethylenetriamine pentaacetic acid, ascorbic acid, ascorbyl palmitate, sodium bisulfate, erythorbic acid, and mixtures thereof.
- 33. A composition according to claim 32 wherein at least one of the agents is **citric acid** and wherein the ratio of iron to **citric acid** is from about 1:1 to about 2000:1; by weight.
- 34. A composition according to claim 33 wherein the ratio of iron to citric acid is from about 20:1 to about 500:1, by weight.
- 35. A composition according to claim 32 wherein at least one of the agents is **ascorbic acid** and wherein the ratio of iron to **ascorbic acid** is from about 4:1 to about 50:1, by weight.

```
ascorbic acid, acetic acid, phosphoric acid or
       mixtures thereof. The most preferred acids are citric and malic acids.
SUMM
       . . . also serve as an antioxidant to stabilize beverage components.
       Examples of commonly used antioxidant include but are not limited to
       ascorbic acid, EDTA (ethylenediaminetetraacetic acid),
       and salts thereof.
            . available as 2.00
Nutrifood .RTM., GNT International, Netherlands)
Apple Juice 3.00
Decaffeinated Green Tea Extract 0.15
Ginseng Extract (Panax) 0.0125
Glycerol 4.00
Aloe Vera Juice 1.00
  Citric Acid 0.10
  Sodium Citrate 0.10
Flavors 0.5
Aspartame 0.004
Acesulfame K 0.009
  Ascorbic Acid 40.0 (mg/100 g)
Vitamin E 15 (mg/100 g)
Beta Carotene 7.2 (mg/100 g)
Vitamin B.sub.6 3.0 (mg/100 g)
Vitamin B.sub.1 2.1 (mg/100 g)
Deionized Water. .
DETD . . . Wt %
 Fruit Juice Single Strength 10.00
 Decaffeinated Green Tea Extract 0.20
 Aloe Gel 1.50
 Glycerol 4.50
 Sucrose 7.00
   Citric Acid 0.20
   Sodium Citrate 0.10
 Flavors 0.15
Ginseng Extract (Panax) 0.01
Deionized Water quantum satis
DETD . . . 15.0
```

Encapsulated ascorbic acid and edible salts of ascorbic acid can also be used. Typically, from about 5% to about 200% of the USRDI of vitamin C is used in. SUMM . . . oxidation can contribute to off-flavor development and flavor loss. Excessive oxidation can also lead to degradation and inactivation of any ascorbic acid or other easily oxidized vitamin or minerals in the mix. SUMM . . acid) or flavonoids (e.g., anthocyanins, catechins, flavonols) that are typically present in these beverages or foods. Suitable reducing agents include ascorbic acid, ascorbyl palmitate, sodium bisulfite, erythorbic acid, as well as mixtures of these reducing agents. The preferred reducing agent is ascorbic acid. Suitable complexing agents include hydroxypolycarboxylic acids such as citric acid, tartaric acid, and malic acid, polyphosphates and their respective salts such as sodium hexametaphosphate, sodium trimetaphosphate, and sodium tripolyphosphate, aminopolycarboxylic. . . acids such as lactic acid and acetic acid, as well as mixtures of these complexing agents. Preferred complexing agents are citric acid, tartaric acid, sodium hexametaphosphate and ethylenediamine tetraacetic acid (EDTA). SUMM [0086] In the case of citric acid, a ratio of complexing agent to iron source in the range of from about 1:1 to about 2000:1, preferably about from about 20:1 to about 500:1, is usually sufficient to prevent undesired color formation. In the case of ascorbic acid, a ratio of reducing agent to iron source in the range of from about 4:1 to about 50:1, preferably about.

DETD . . . the following ingredients:

INGREDIENT Percent by Weight

granulated sucrose 73.9 vitamin premix.sup.1 1 flavors.sup.2 clouding agent.sup.3 1.4 citric acid 12.0 zinc gluconate 0.4 ferric saccharate 0.6 sodium citrate 5.1 color 0.1 Total 100.00 Vitamin Premix.sup.1 Vitamin C 60.2

Encapsulated ascorbic acid and edible salts of ascorbic acid can also be used. Typically, from about 5% to about 200% of the USRDI of vitamin C is used in. SUMM . . oxidation can contribute to off-flavor development and flavor loss. Excessive oxidation can also lead to degradation and inactivation of any ascorbic acid or other easily oxidized vitamin or minerals in the mix. SUMM . . acid) or flavonoids (e.g., anthocyanins, catechins, flavonols) that are typically present in these beverages or foods. Suitable reducing agents include ascorbic acid, ascorbyl palmitate, sodium bisulfite, erythorbic acid, as well as mixtures of these reducing agents. The preferred reducing agent is ascorbic acid. Suitable complexing agents include hydroxypolycarboxylic acids such as citric acid, tartaric acid, and malic acid, polyphosphates and their respective salts such as sodium hexametaphosphate, sodium trimetaphosphate, and sodium tripolyphosphate, aminopolycarboxylic. . . acids such as lactic acid and acetic acid, as well as mixtures of these complexing agents. Preferred complexing agents are citric acid, tartaric acid, sodium hexametaphosphate and ethylenediamine tetraacetic acid (EDTA). SUMM [0085] In the case of citric acid, a ratio of complexing agent to iron source in the range of from about 1:1 to about 2000:1, preferably about from about 20:1 to about 500:1, is usually sufficient to prevent undesired color formation. In the case of ascorbic acid, a ratio of reducing agent to iron source in the range of from about 4:1 to about 50:1, preferably about.

DETD . . . the following ingredients:

INGREDIENT Percent by Weight

granulated sucrose 73.9
vitamin premix.sup.1 1
flavors.sup.2 4.9
clouding agent.sup.3 1.4
citric acid 12.0
zinc gluconate 0.4
ferric saccharate 0.6
sodium citrate 5.1
color 0.1
Total 100.00

Vitamin Premix.sup.1

Oil in water emulsion. . . DETD . . . 7A Ex. 7B Component % w/w % w/w Natural and artificial flavors 0.27 0.27 Tea solids 0.25 0.25 High Fructose Corn Syrup 55 7.40 7.40 Citric acid 0.052 0.052 Sodium citrate 0.078 0.078 0.013 Aspartame 0.013 Caramel Color 0.08 0.08 Potassium sorbate 0.015 (150 PPM) 0.00 Essential oil of black mustard 0.0012 (12 PPM) 0.002. . L19 ANSWER 2 OF 23 USPATFULL 2002:119366 USPATFULL ACCESSION NUMBER: TITLE: Color stable iron fortified compositions INVENTOR(S): Henry, William John, Taylor Mill, KY, UNITED STATES Xi, Xiaobing, West Chester, OH, UNITED STATES Favre, Michel Lucien Hubert Lannelongue, Cincinnati, OH, UNITED STATES Mehansho, Haile, Fairfield, OH, UNITED STATES Mellican, Renee Irvine, Fairfield, OH, UNITED STATES Li, Jianjun, West Chester, OH, UNITED STATES PATENT ASSIGNEE(S): The Procter & Gamble Co. (U.S. corporation) DATE NUMBER KIND -----PATENT INFORMATION: US 2002061347 A1 20020523 US 2001-996313 A1 20011128 APPLICATION INFO.: (9) RELATED APPLN. INFO.: Continuation of Ser. No. US 1999-445630, filed on 9 Dec 1999, PENDING Continuation-in-part of Ser. No. US 1995-549109, filed on 27 Oct 1995, ABANDONED DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION LEGAL REPRESENTATIVE: THE PROCTER & GAMBLE COMPANY, PATENT DIVISION, IVORYDALE TECHNICAL CENTER - BOX 474, 5299 SPRING GROVE AVENUE, CINCINNATI, OH, 45217 NUMBER OF CLAIMS: 25 EXEMPLARY CLAIM: LINE COUNT: 1054 CAS INDEXING IS AVAILABLE FOR THIS PATENT. . . . chelated iron that do not impart objectionable color due to the inclusion of a ferric ion reducing agent such as ascorbic acid and/or an agent such as citric acid that is capable of preferentially complexing ferric ion in the presence of polyphenols or flavonoids that are typically present in. . .

. . has been surprisingly found that ferric ion will not cause such off-color if a ferric ion reducing agent, such as ascorbic acid, and/or an agent such as citric acid that is capable of preferentially complexing ferric ion in the presence

mixtures thereof; or other edible acid sufficient to lower the pH to

[0021] (5) from about 1% to about 50% citric acid, sodium citrate, tartaric acid or malic acid or

SUMM

SUMM

between 3. .

of polyphenols or flavonoids that are typically present in. SUMM . from alanine, arginine, asparagine, aspartic acid, cysteine, cystine, glutamine, glutamic acid, glycine, histidine, hydroxyproline, isoleucine, leucine, lysine, methionine, ornithine, phenylalanine, proline, serine, threonine, tryptophan, tyrosine and valine or dipeptides, tripeptides or quadrapeptides formed by any combination of these alpha amino acids... SUMM . fructose being the more preferred. The carboxylic acid providing the "carboxylate counterion" can be any ingestible carboxylic acid such as citric acid, malic acid, tartaric acid, lactic acid, succinic acid, propionic acid, etc., as well as mixtures of these acids. SUMM [0058] Commercially available sources of vitamin C can be used herein. Encapsulated ascorbic acid and edible salts of ascorbic acid can also be used. Typically, from about 5% to about 200% of the USRDI of vitamin C is used in. SUMM . . oxidation can contribute to off-flavor development and flavor loss. Excessive oxidation can also lead to degradation and inactivation of any ascorbic acid or other easily oxidized vitamin or minerals in the mix. SUMM . . acid) or flavonoids (e.g., anthocyanins, catechins, flavonols) that are typically present in these beverages or foods. Suitable reducing agents include ascorbic acid, ascorbyl palmitate, sodium bisulfite, erythorbic acid, as well as mixtures of these reducing agents. The preferred reducing agent is ascorbic acid. Suitable complexing agents include hydroxypolycarboxylic acids such as citric acid, tartaric acid, and malic acid, polyphosphates and their respective salts such as sodium hexametaphosphate, sodium trimetaphosphate, and sodium tripolyphosphate, aminopolycarboxylic. . . acids such as lactic acid and acetic acid, as well as mixtures of these complexing agents. Preferred complexing agents are citric acid, tartaric acid, sodium hexametaphosphate and ethylenediamine tetraacetic acid (EDTA). SUMM [0085] In the case of citric acid, a ratio of complexing agent to iron source in the range of from about 1:1 to about 2000:1, preferably about from about 20:1 to about 500:1, is usually sufficient to prevent undesired color formation. In the case of ascorbic acid, a ratio of reducing agent to iron source in the range of from about 4:1 to about 50:1, preferably about.

DETD . . . the following ingredients:

ACCESSION NUMBER:

2000:88153 USPATFULL

TITLE:

Sustained-release preparation Igari, Yasutaka, Kobe, Japan

INVENTOR(S):

Yamagata, Yutaka, Kobe, Japan

PATENT ASSIGNEE(S):

Takeda Chemical Industries, Ltd., Osaka, Japan

(non-U.S. corporation)

NUMBER KIND DATE -----PATENT INFORMATION: US 6087324 20000711 US 1996-644631

APPLICATION INFO.:

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NUMBER DATE JP 1993-153393 ------PRIORITY INFORMATION: 19930624 19940909 JP 1994-310291 19941214 DOCUMENT TYPE: Utility FILE SEGMENT: Granted PRIMARY EXAMINER: O'Sullivan, Peter LEGAL REPRESENTATIVE: Foley & Lardner

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SUNSTAR INC

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(72)Inventor:

RI EI

(54) WATER-IN-OIL TYPE EMULSION COSMETIC

(57) Abstract:

PROBLEM TO BE SOLVED: To obtain a water-in-oil type emulsion cosmetic excellent in emulsion stability, having a refreshing and good feeling in use.

SOLUTION: This water in-oil type emulsion cosmetic comprises (A) 0.5-20wt.% of a pyrrolidonecarboxylate, (B) 0-5wt.% of a melanin production nonionic surfactant (e.g. diglyceryl monoisostearate) liquid at a normal temperature, (C) 15-35wt.% of an oily component (e.g. squalane) and (D) water. A part of water is mixed with the whole amount of the component A to prepare an aqueous solution and a mixture of the aqueous solution and the component B is prepared. The mixture is blended with the component C, then with the rest of water and emulsified to give the objective water-in-oil type emulsion cosmetic. The cosmetic is properly mixed with a well-known component. When the cosmetic is used as an anti-suntan cosmetic, the cosmetic is mixed with 0.1-30wt.% of an anti-suntan component except an oily ultraviolet light absorber. An emollient cream, hand cream, cleansing cream, foundation, make-up foundation cream, pack, milky lotion, etc., are prepared besides the anti-suntan cosmetic.

LEGAL STATUS

[Date of request for examination]

26.09.2001

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decision of rejection or application converted registration]

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[Date of registration]

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rejection]

[Date of extinction of right]

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- 1. This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.**** shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

DETAILED DESCRIPTION

[Detailed description]

[0001]

[The technical field to which invention belongs] The emulsion stability of this invention is good and it is related with the charge of oil Nakamizu type emulsification makeup which is excellent in the feeling of use.

[0002]

[The conventional technique] Conventionally, the charge of oil Nakamizu type emulsification makeup uses lipophilic property polyhydric-alcohol fatty-acid-ester system activators, such as a glycerine fatty acid ester and a sorbitan fatty acid ester, for an emulsifier, mixes this to an oil phase, after carrying out heating lysis, carries out mixed emulsification with the aqueous phase warmed to temperature of the same grade, and is **ed by about 70-80 degrees C. However, at the charge of oil Nakamizu type emulsification makeup manufactured as mentioned above, there was a fault that the system excellent in a temperature stability or usability was hard to be obtained. Although there was the technique of blending a wax with an oil phase so much, and raising the viscosity nature of an oil phase as one of technique which improves a temperature stability, although the freeze thaw stability of this improved, the high temperature oxidation stability could not fully be improved and had the fault of spoiling usability, such as mileage.

[0003] Moreover, although the pyrrolidone carboxylate was a component currently used widely for the purpose of ****, pH adjustment, etc. by the charge of emulsification makeup, the effect of improving the stability of the charge of oil Nakamizu type emulsification makeup was not known.

[0004]

[Object of the Invention] It is in the purpose of this invention offering the charge excellent in the emulsion stability of oil Nakamizu type emulsification makeup which has the clean good feeling of use.

[The means for solving a technical problem] As a result of inquiring zealously that these problems should be solved, this invention person finds out the charge of oil Nakamizu type emulsification makeup which has the feeling of use which was excellent with the good stability which comes to blend the lipophilic property nonionic surface active agent of the shape of a pyrrolidone carboxylate and ordinary temperature liquid, an oily component, and water, and came to complete this invention. That is, this invention relates to the charge of oil Nakamizu type emulsification makeup characterized by blending 0.5 - 20 % of the weight of (A) pyrrolidone carboxylates, 0.5 - 5 % of the weight of (B) ordinary temperature liquid-like lipophilic property nonionic surface active agents, and (C) oiliness component 15 - 35 % of the weight (D) water.

[Gestalt of implementation of invention] With alkali, such as a sodium hydroxide and a potassium hydroxide, the pyrrolidone carboxylate used for this invention neutralizes beforehand, and can also use the pyrrolidone carboxylic acid of the disengagement which remains as it is or can similarly receive commercially the aqueous solution of the specific salt which can come to hand commercially. As a pure part, the loadings are 0.5 - 20 % of the weight to the constituent whole quantity, and especially its 1.0 - 15 % of the weight is desirable. If the loadings of a pyrrolidone carboxylate are not filled to 0.5% of the weight, emulsification will be spoiled, or if it is scarce and it blends [it exceeds 20% of the weight and] with an emulsion stability, the feelings of use, such as a feeling of stickiness, will be spoiled.

[0009] these ordinary temperature -- a liquefied lipophilic property nonionic surfactant -- one sort -- or two or more sorts can

be used arbitrarily and the loadings are 0.5 - 5 % of the weight to the constituent whole quantity Unless it fills the loadings of an ordinary temperature liquid-like lipophilic type surfactant to 0.5% of the weight, it cannot emulsify, and a stability will be spoiled, if it exceeds 5% of the weight and it blends.

[0010] Especially the oily component used for this invention should just be an oily component which cannot be limited and can usually be used for the charge of makeup. for example, a liquid paraffin, squalane, and an olefin -- me -- hydrocarbons. such as ******, vaseline, a ceresin, paraffin, and a micro crystalline wax Lows, such as lanolin, yellow bees wax, and a candelilla low Higher alcohol, such as fatty acids, such as stearin acid and an oleic acid, a cetanol, and a stearyl alcohol An oleic-acid octyl dodecyl, oleic-acid oleyl, octanoic-acid isostearyl, An octanoic-acid cetyl, a myristic-acid isopropyl, ***** acid neopentyl glycol, Fatty acid ester, such as neopentylglycol dicaprate and a tetrapod 2 ** hexanoic-acid pen ****** slit Silicon oil, such as a methyopolysiloxane, a methylphenyl polysiloxane, and a high polymerization methyopolysiloxane, Metallic soaps, such as myristic-acid magnesium, an aluminum stearate, and a magnesium stearate A para dimethylamino benzoic-acid octyl, a salicylic-acid octyl, salicylic-acid gay menthyl, Oily ultraviolet ray absorbents, such as Para methoxycinnamic acid 2-ethylhexyl, a 4-methoxycinnamic acid 2-ethoxy ethyl, a ***** methoxycinnamic acid Monod 2-ethyl hexanoic-acid glyceryl, and an oxybenzone, etc. are mentioned. [0011] A liquid paraffin, squalane, a micro crystalline wax, yellow bees wax, a cetanol, ******* acid neopentyl glycol, neopentylglycol dicaprate, a tetrapod 2 ******* hexanoic-acid pen ***** slit, silicon oil, an aluminum stearate, a magnesium stearate, Para methoxycinnamic acid 2-ethylhexyl, a 4-methoxycinnamic acid 2-ethoxy ethyl, a ****** methoxycinnamic acid Monod 2-ethyl hexanoic-acid glyceryl, and an oxybenzone are desirable especially. [0012] These oiliness component may be arbitrarily used combining one sort or two sorts or more, the loadings will be 15 -35 % of the weight, if loadings are not filled to 15% of the weight, it will be hard coming to manufacture, and an emulsion stability will be spoiled, if it exceeds 35% of the weight and it blends.

[0013] furthermore, the organic or inorganic suntan setting component excluding an oily ultraviolet ray absorbent when using the charge of oil Nakamizu type emulsification makeup of this invention for suntan setting -- one sort -- or two or more sorts can be blended and a tetrapod hydroxy benzophenone, an oxybenzone sulfonate, etc. can illustrate particle titanium oxide, a particle zinc oxide, etc. as an inorganic suntan setting component as an organic suntan setting component Moreover, if it is in an inorganic suntan setting component, surface treatment may be carried out by silicone, a metallic soap, a higher fatty acid, silicon oxide, an alumina, the oxidization zirconia, amino acid, the collagen, lecithin, etc. The loadings of suntan setting components other than these oiliness ultraviolet ray absorbent are 0.1 - 30 % of the weight to the constituent whole quantity, and its 5 - 20 % of the weight is especially desirable.

[0014] The charge of oil Nakamizu type emulsification makeup of this invention besides the charge for suntan setting of makeup An emollient cream, A hand cream, cleansing cream, foundation, the cream for makeup base, Can use for a pack, a milky lotion, etc. and in the domain which does not spoil the effect of this invention according to each purpose A glycerol, A diglycerol, a dipropylene glycol, a triethylene glycol, Polyhydric alcohol, such as 1, 3-butylene glycol, and a propylene glycol, Mineral salt, such as mucopolysaccharides, such as a hyaluronic acid, a sodium chloride, and magnesium sulfate, Well-known components, such as pigments, such as **** agents, such as vitamins, glycyrrhetinic acid ester, and glycyrrhizin acid chloride, talc, a kaolin, and a mica, antiseptics, a dispersant, an antioxidant, coloring matter, a pigment, pH regulator, a chelating agent, an astringent, and an aromatizing agent, can be blended suitably.

[0015] Next, the manufacture technique of the charge of oil Nakamizu type emulsification makeup of this invention is shown. (The A method) The aqueous solution which mixed all of pyrrolidone carboxylates in a part of water is prepared, and, subsequently the mixture of this pyrrolidone carboxylate aqueous solution and an ordinary temperature liquid-like lipophilic property nonionic surface active agent is prepared. After mixing this mixture and an oily component, it mixes with the remainder of water and emulsifies.

[0016] Or (the B method) the aqueous solution which mixed a part of pyrrolidone carboxylate in a part of water is prepared, and, subsequently the mixture of this pyrrolidone carboxylate aqueous solution and an ordinary temperature liquid-like lipophilic property nonionic surface active agent is prepared. How to mix with the remainder of the water containing the remainder of a pyrrolidone carboxylate, and emulsify [after mixing this mixture and an oily component]. [0017]

[Example] Next, it has an example and this invention is explained still in detail. Needless to say, this invention is not limited to these examples. Especially, [%] in an example shows [weight %], as long as it is unstated. The examples 1-7 and the examples 1-7 of a comparison which are shown in Table 1 were prepared by the declared technique, and the emulsion stability and the feeling of use were evaluated. An appraisal method is shown.

[0018] (The evaluation technique)

1. Leave it immediately on 40 degrees C, a room temperature, and -5-degree C conditions after preparing the example (and example of a comparison) which carried out emulsion-stability manufacture. The macro-scopic judging of the neglect sample of each conditions was carried out by the following criterion after manufacture in the 1st month.

The <criterion> O:separation of is not done.

O: the whole emulsion is coarse although the separation has not been carried out.

**: -- it has dissociated slightly

x: It has separated into completeness.

[0019] 2. Five feeling panelists of use were made to real-use it, and the following criterion estimated from the viewpoint of ****, the feeling of oiliness, and the feeling of stickiness.

<Criterion> O:5 person answers that it is good.

O:3-4 person answers that it is good.

**: 1-2 person answers that it is good.

x: 0 person answers that it is good.

[0020] 3. 2 evaluation item of the comprehensive evaluation <criterion> O:above is all O or O.

**: Among the above-mentioned 2 evaluation items, the feeling of use is ** and an emulsion stability is more than O. x: For any of the above-mentioned 2 evaluation item, or one side, x or an emulsion stability is **.

[0021]

[Table 1]

			実施例 (%)							比較例 (%)						
成分			1	2	3	4	5	6	7	1	2	8	4	6	6	7
スクワラン		15.0	10.0	13.0	15.0	15.0	15.0	15.0	28.0	8.0	15.0	15.0	15.0	15.0	15.0	
ミツロウ		2.0	1.0	1.0	5.0	20	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	
ワセリン		2.0	1.0	1.0	5.0	20	2.0	2.0	2.0	-	20	20	20	2.0	2.0	
ステアリン酸マグネシウム		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
デカメチルシクロペンタシロキサン		1.0	6.0	-	9.0	1.0	_	-	4.0	8.0	1.0	1.0	1.0	1.0	1.0	
モノイソステアリン酸ジグリセリル			2.0	2.0	20	20	20	0.5	5.0	2.0	2.0	0.3	8.0	2.0	2.0	20
ピロリドンカルボン酸Na液 (50%)			10.0	40.0	10.0	10.0	1.0	10.0	10.0	10.0	10.0	10.0	10.0	44.0	0.6	-
pーオキシ安息香酸メチル			0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
塩化ナトリウム			1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1、3-ブチレングリコール			5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	6.0	6.0	5.0
精製水			残部	残部	残部	残邮	残部	残部	残部	残部	残邮	残部	残部	残部	残邮	残部
台計			100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
製造法		Α	В	Α	Α	A	A	A	Α	Α	Α	Α	В	Α	Α	
評価	安定性	金金	6	Φ	0	0	Ф	0	0	×	Δ	×	×	0	×	×
		40℃	0	0	0	0	0	0	0	Δ	×	×	×	0	×	×
		-6℃	0	0	0	0	0	0	0	х	х	×	×	0	×	×
	使用感		0	Δ	0	Δ	0	0	Δ	×	х	×	×	×	×	×
	総合評価		0	Δ	0	Δ	0	0	Δ	х	×	×	×	×	×	×

[0022] From the result shown in Table 1, the example was accepted to excel in the emulsion stability and the feeling of use compared with the example of a comparison.

[0023]

Example 8 (cream foundation)

Component Loadings (%)

A liquid paraffin 10.0 Lanolin 1.5 Cetanol 1.5 Decamethyl cyclopentasiloxane 10.0 Talc 2.0 Titanium oxide 5.0 Iron oxide 2.0 Magnesium stearate 1.0 Polyoxyethylene (5EO) hydrogenated castor oil 1.5 Iso ******** acid diglyceryl 2.5 Pyrrolidone carboxylic-acid sodium aqueous solution (50%) 10.0 1, 3-butylene glycol 5.0 Sodium chloride 1.0 Antiseptics Minute amount Perfume Minute amount Purified water Residue Sum 100.0 [0024]

Example 9 (sunscreen cream)

Component Loadings (%)

Squalane 4.0 Micro crystalline wax 2.0 Cetanol 1.0 Decamethyl cyclopentasiloxane 10.0 High polymerization methyopolysiloxane 0.3 Neopentylglycol dicaprate 5.0 ***** methoxycinnamic acid Monod 2 - Ethyl Hexanoic-Acid Glyceryl 4.0 Dibenzoylmethane 3.0 Monochrome oleic-acid diglyceryl 3.5 Particle zinc oxide 5.0 Particle titanium oxide 5.0 Magnesium stearate 0.5 Pyrrolidone carboxylic-acid sodium aqueous solution (50%) 2.0 Propylene glycol 3.0 Antiseptics minute amount Perfume Minute amount Purified water Residue Sum 100.0 [0025]

Example 10 (emollient cream)

Component Loadings (%)

Squalane 17.0 Yellow bees wax 2.0 Magnesium stearate 0.5 Isostearic acid diglyceryl 1.5 Pyrrolidone carboxylic-acid sodium aqueous solution (50%) 8.0 Antiseptics Minute amount Perfume Minute amount Purified water Residue Sum 100.0 [0026] [Effect of the invention] According to this invention, it excels in the stability which has improved the emulsion stability and the feeling of use which are the technical probrem of the conventional charge of oil Nakamizu type emulsification makeup, and the charge of oil Nakamizu type emulsification makeup which the feeling of use felt refreshed can be offered.

[Translation done.]

* NOTICES *

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- 1. This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.**** shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

CLAIMS

[Claim]

[Claim 1] (A) 0.5 - 20 % of the weight of pyrrolidone carboxylates, 0.5 - 5 % of the weight of (B) ordinary temperature liquid-like lipophilic property nonionic surface active agents, the charge of oil Nakamizu type emulsification makeup characterized by blending (C) oiliness component 15 - 35 % of the weight (D) water.

[Claim 2] (1): The process which prepares the solution which mixed a part or all of a pyrrolidone carboxylate in a part of water. (2): The process which prepares the mixture of the pyrrolidone carboxylate aqueous solution and an ordinary temperature liquid-like lipophilic property nonionic surface active agent. (3): The process which mixes the mixture and the oily component of (2). (4): The manufacture technique of the charge given in the claim 1 which has the process which mixes the mixture of (3), and the remainder of water of oil Nakamizu type emulsification makeup.

[Translation done.]